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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,317	12/06/2000	Normand Nantel	0053.00	1032
21968	7590	01/14/2004	EXAMINER	
NEKTAR THERAPEUTICS 150 INDUSTRIAL ROAD SAN CARLOS, CA 94070			PHAM, HOA Q	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/731,317	NANTEL ET AL.	
	Examiner	Art Unit	
	Hoa Q. Pham	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 12, 14-19, 30-33, 50-52, 57-59, 64-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson et al (4,147,618) (of record).

Regarding claim 1, 4, 5, 6, 14, 17, 18, 30, 31, 32, and 39, Richardson et al discloses a method and apparatus for measuring product contents comprises a light source (14) for directing light beam onto a substance (8), detector (20) for measuring the emitted light from the substance, and a processor (100) coupled to the detector for determining the mass of the substance based on the measured response (see abstract, column 1, lines 5-25, column 2, lines 13-16, column 3, lines 12-24, column 7, lines 20-31 and figure 1). Richardson et al teaches that the apparatus is particularly adapted to determine the mass of the contents of a product, which mass is relatively small compared to the mass of entire product; however, it is well known in the that there are various systems are known for measuring the mass of the contents of the product such as medicinal capsules, which mass is relatively large compared to the mass of entire product (column 1, lines 11-66). Those of ordinary skill in the art at the time the invention was made to modify the system of Richardson et al so that the system is particularly adapted to determine the contents of medicinal products on the basis of the known

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system mentioned by Richardson et al. The rationale for this modification would have arisen from the fact that depending on what product to be measured the system will be modified so that an accuracy of the measurement is obtained.

Regarding claim 2, see abstract for a predetermined portion of the volume of the product.

Regarding claims 3 and 19, see column 1, lines 27-28 for the use of power.

Regarding claims 7 and 33, Richardson et al teaches that the scattered light from the product is detected and converted into electrical signal which representative of the mass of the exposed contents (column 2, lines 33-44).

Regarding claim 15, column 2, lines 64-67 and column 7, lines 32-38, teach that the mass of the contents of a product is within predetermined limits.

Regarding claim 16, see figure 1 of Richardson.

Regarding claim 19, Richardson teaches the use of vacuum source for holding the cartridge which containing powder (column 7, lines 10-40).

Regarding claims 50-52, 57-59, and 64-66, Richardson et al teaches that the powder substance is from medicinal capsules, thus it is inherent that the particles having mass median diameter in the range from 0.1 μm to about 100 μm .

3. Claims 8-11, 13, 20-29, 34-38, 40-49, 53-56, 60-63, and 67-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson et al in view of Pryor et al (GB-2077422), Loy (4,461,363), Withnell et al (3,744,582), Hinzpeter (4,640,376) and Annis et al (4,825,454).

Regarding claims 8, 34, and 40, Richardson et al does not explicitly teach that measuring interference pattern cause by emitted light from the substance and correlating the impedance with the associated mass; however, such a feature is known in the art as taught by Pryor (of record). Pryor, from the same field of endeavor, teaches the use of interference pattern for determining the weight of an item (page 2, lines 16-20, page 1, lines 5-8, page 3, lines 7-10 and 50-55). It would have been obvious to one having ordinary skill in the art at the time the invention was made to correlating the interference pattern with an associated mass for the purpose of determining the mass of the substance as suggested by Pryor because both methods are used for the same purpose. A substitution one for another is generally recognized as within the level of ordinary skill in the art.

Regarding claim 9 and 35, Loy (of record) discloses a high-speed capacitive weighing method and apparatus in which the substance is applied by current or voltage and the mass of the substance is determined on the basis of determining the impedance of the substance (abstract and figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the optical inspection system of Richardson et al by a capacitive weight apparatus as taught by Loy because they function in the same manner.

Regarding claims 10-11 and 36-38, Withnell et al (of record) teaches another method for determining the mass of the substance by applying vibration energy to the substance and measuring energy dissipation caused by the substance (figure 1 and abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the energy source of Richardson et al by a vibration energy taught by Withnell because they function in the same manner.

Regarding claims 21-27, 41, and 46-47, Hinzpeter (of record) teaches that it is well known in the art to provide a calibration step prior to the step of measuring (column 3, lines 7-16). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include in Richardson et al addition step of calibration as taught by Hinzpeter. The rationale for this modification would have arisen from the fact that by including additional step of calibration would improve the accuracy of the measurement.

Regarding claim 13, Annis et al, from the same field of endeavor, teaches another way of using tomographic imaging system for sorting the products. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the inspection system of Richardson et al by the system of Annis et al because they both are used for inspecting and sorting products.

Regarding claims 20 and 28-29, column 2, lines 64-67 and column 7, lines 32-38 of Richardson et al, teach that the mass of the contents of a product is within predetermined limits.

Regarding claim 42, Richardson et al does not explicitly teach the use of a filter. However, it would have been obvious to include in the optical system of Richardson a filter if a certain wavelength or range of wavelengths is selected.

Regarding claims 43, 53-56, 60-63 and 67-73, Richardson et al teaches the use of vacuum source for holding the cartridge which containing powder (column 7, lines 10-40). Richardson et al does not explicitly teach that the vacuum source is used for holding the powder substance during depositing; however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to detect the powder substance

instead of the powder cartridge if the powder substance is measured. In addition, the vacuum source would function in the same manner for the purpose of holding the powder substance.

Regarding claims 44-45, see figure 2 of Richardson et al.

Regarding claim 48, it would have been obvious to one having ordinary skill in the art to include in the processor a code because this is a known way in the computer processing analysis.

Regarding claim 49, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the light source of Richardson et al by a laser source because they are function in the same manner.

Response to Arguments

4. Applicant's arguments filed 10/28/03 have been fully considered but they are not persuasive.

a. Applicant's remarks argues that Richardson et al does not disclose measuring the mass of powder substance which comprises a pharmaceutical agent. However, as mentioned above the system of Richardson is modified from a system that measuring the mass of powder substance of a medicinal capsule (column 1). Thus depending on what kinds of product, it would have been obvious to one having ordinary skill in the art at the time to modify the system of Richardson or using the known system for the purpose of determining the mass of powder substance which comprises a pharmaceutical agent.

b. Applicant argues that a cavity for receiving the powder substance is not disclosed by the references. Applicant is noted that the system should be modified somehow within the metering chamber so that the powder substance is hold within the chamber. In addition, figure 6 of Loy teaches that the power substance from the hopper (86) is hold within a cavity of a powder machine (80).

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

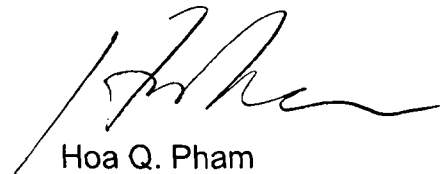
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (703) 308-

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4808. The examiner can normally be reached on 6:30 AM to 5 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (703) 308-4881. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to read 'H. Pham', with a long horizontal flourish extending to the right.

Hoa Q. Pham
Primary Examiner
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HP
January 7, 2004